

Department of Energy

Pt. 434

(Baseline building consumption – Receptacle and process loads).

(2) For Federal buildings for which design for construction began on or after August 10, 2012, but before July 9, 2014, each Federal agency shall determine energy consumption levels for both the ASHRAE Baseline Building 2007 and proposed building by using the Performance Rating Method found in Appendix G of ASHRAE 90.1-2007 (incorporated by reference, see §433.3), except the formula for calculating the Performance Rating in paragraph G1.2 shall read as follows:

Percentage improvement = $100 \times ((\text{Baseline building consumption} - \text{Receptacle and process loads}) - (\text{Proposed building consumption} - \text{Receptacle and process loads})) / (\text{Baseline building consumption} - \text{Receptacle and process loads})$ (which simplifies as follows):

Percentage improvement = $100 \times ((\text{Baseline building consumption} - \text{Proposed building consumption}) / (\text{Baseline building consumption} - \text{Receptacle and process loads}))$.

(3) For Federal buildings for which design for construction began on or after July 9, 2014, each Federal agency shall determine energy consumption levels for both the ASHRAE Baseline Building 2010 and proposed building by using the Performance Rating Method found in Appendix G of ASHRAE 90.1-2010 (incorporated by reference, see §433.3), except the formula for calculating the Performance Rating in paragraph G1.2 shall read as follows:

Percentage improvement = $100 \times ((\text{Baseline building consumption} - \text{Receptacle and process loads}) - (\text{Proposed building consumption} - \text{Receptacle and process loads})) / (\text{Baseline building consumption} - \text{Receptacle and process loads})$ (which simplifies as follows):

Percentage improvement = $100 \times ((\text{Baseline building consumption} - \text{Proposed building consumption}) / (\text{Baseline building consumption} - \text{Receptacle and process loads}))$.

(b) Each Federal agency shall consider laboratory fume hoods and kitchen ventilation systems as part of the ASHRAE-covered HVAC loads subject

to the 30 percent savings requirements, rather than as process loads.

[71 FR 70281, Dec. 4, 2006, as amended at 76 FR 49284, Aug. 10, 2011; 78 FR 40953, July 9, 2013]

§ 433.6 Sustainable principles for siting, design and construction. [Reserved]

§ 433.7 Water used to achieve energy efficiency. [Reserved]

§ 433.8 Life-cycle costing.

Each Federal agency shall determine life-cycle cost-effectiveness by using the procedures set out in subpart A of part 436. A Federal agency may choose to use any of four methods, including lower life-cycle costs, positive net savings, savings-to-investment ratio that is estimated to be greater than one, and an adjusted internal rate of return that is estimated to be greater than the discount rate as listed in OMB Circular Number A-94 “Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs.”

PART 434—ENERGY CODE FOR NEW FEDERAL COMMERCIAL AND MULTI-FAMILY HIGH RISE RESIDENTIAL BUILDINGS

Sec.

434.99 Explanation of numbering system for codes.

Subpart A—Administration and Enforcement—General

- 434.100 Purpose.
- 434.101 Scope.
- 434.102 Compliance.
- 434.103 Referenced standards (RS).
- 434.105 Materials and equipment.

Subpart B—Definitions

- 434.201 Definitions.

Subpart C—Design Conditions

- 434.301 Design criteria.

Subpart D—Building Design Requirements—Electric Systems and Equipment

- 434.401 Electrical power and lighting systems.
- 434.402 Building envelope assemblies and materials.